

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

Applicant's or agent's file reference	FOR FURTHER ACTION See Form PCT/IPEA/416	
WS 2255 PCT		
International application No.	International filing date (Day/Month/Year)	Priority date (Day/Month/Year)
PCT/EP2004/014788	29.12.2004	18.02.2004
International Patent Classification (IPC) or national classification and IPC B65H54/42, B65H54/46, B65H54/48, B65H54/70		
Applicant SAURER GMBH & CO. KG <i>et al.</i>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority according to Article 35 and transmitted to the Applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising
 - a. ☐ Sheets (*sent to the Applicant and to the International Bureau*), as follows:
 - ☐ Sheets of the description, claims and/or drawing which have been amended and are the basis of this report and/or sheets containing rectifications authorised by this authority (see Rule 70.16 and Section 607 of the Administration instructions).
 - ☐ Sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the International Application as filed, as indicated in Item 4 of Box No. 1 and the supplemental box.
 - b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s), containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the supplemental box relating to the sequence listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinions with regard to novelty, inventive step and any industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the request for preliminary examination 13.08.2005	Date of completion of this report 11.01.2006
Name and mailing address of the International Examining Authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorised officer Kising, A Tel. +49 89 2399- <div style="text-align: right;">EPO stamp</div>

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No. PCT/EP2004/014788

Box No. 1 Basis of the report

1. With regard to the **language**, this report is based on the International Application in the language in which it was filed, if nothing different is stated under this point.

- ☐ The report is based on a translation from the original language into the following language, which is the language of the translation, which has been filed for the following purpose:
- ☐ international search (according to Rules 12.3 and 23.1b)
 - ☐ publication of the international application (according to Rule 12.4)
 - ☐ international preliminary examination (according to Rules 55.2 and/or 55.3)

2. With regard to the **elements*** of the international application, the report is based on *(replacement sheets which have been furnished to the receiving office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, pages

1-12 in the originally filed version

Claims, No.

1-9 in the originally filed version

Drawings, sheets

1/5-5/5 in the originally filed version

☐ a sequence listing and/or any related tables – see supplemental box relating to sequence listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ Description: page
- ☐ Claims: No.
- ☐ Drawings: Sheet/Figs.
- ☐ Sequence listing (*specify*):
- ☐ any tables relating to the sequence protocol (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered in the opinion of the authority to go beyond the disclosure as originally filed, as indicated in the supplemental box (Rule 70.2 c)).

- ☐ Description: page
- ☐ Claims: No.
- ☐ Drawings: Sheet/Figs.
- ☐ Sequence listing (*specify*):
- ☐ any tables relating to the sequence listing (*specify*):

* If Item 4 applies, some or all of the sheets may be marked "superseded".

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International Application No.
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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; documents and explanations supporting such statement

- | | | |
|----|-------------------------------|-------------------------------|
| 1. | Statement | |
| | Novelty (N) | Yes: Claims 1-9
No: Claims |
| | Inventive step (IS) | Yes: Claims 1-9
No: Claims |
| | Industrial applicability (IA) | Yes: Claims 1-9
No: Claims |

2. Documents and explanations (Rule 70.7):

see supplementary sheet

Box No. VII Certain defects in the international application

The international application was found to have the following defects with regard to form or content:

see supplementary sheet

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(SUPPLEMENTARY SHEET)**

International Application No. PCT/EP2004/014788

Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; documents and explanations supporting such statement

1. Reference is made to the following documents:

- D1: US-A-3 813 051 (MILLER H, US) 28th May 1974 (1974-05-28)
- D2: DE 101 59 613 A1 (W. SCHLAFHORST AG & CO) 12th June 2003 (2003-06-12)
- D3: DE 38 15 253 A1 (W. SCHLAFHORST & CO, 4050 MOENCHENGLADBACH, DE) 16th November 1989 (1989-11-16)
- D4: DE 41 03 082 A1 (H. D. EICHELBERG & CO GMBH, 5750 MENDEN, DE; HDE METALLWERK GMBH, 5750) 27th August 1992 (1992-08-27)

2. The present application fulfils the requirements of Article 33(1), 33(2) and 33(3) PCT.

Claim 1:

Document D1, which is regarded as the closest prior art discloses (see column 3, line 24 to line 25 and Fig. 1) a drive roller for a textile machine producing cross-wound bobbins and, apart from the features of the preamble, also discloses the feature of the characterising part with regard to the thin-walled metal tube. However, D1 does not disclose that the metal tube is profiled by high-pressure internal forming.

No indication of this special production method, which leads to a very smooth surface with profiling of the metal tube and is easy and economical, is provided either from D1 or D2 or D3.

In the present case, the information about the high-pressure internal forming production process leads directly to the resulting product with the smooth, profiled surface. D4 indeed discloses the production method *per se* but not in conjunction with the profiling of metal tubes for the use of the drive roller in textile machines.

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Proceeding from D1 and D2 or D3, the person skilled in the art would not use the production method of D4 either with the object set of a drive roller with a good service life, high entraining force and thread-smooth profiling, as this is indeed provided for different use purposes, but not for friction cylinders and certainly not for drive rollers profiled in this manner for cross-winding rollers in the textile sector.

As a result, the subject of claim 1 should meet the requirements of Article 33(2) and 33(3) PCT.

Claims 2 to 9:

The dependent claims 2 to 9 merely relate to special configurations of the invention, which also meet the above-mentioned criteria on the basis of the above-mentioned independent claim 1.

3. As the invention is technically producible and applicable, the conditions of Article 33(4) PCT are also met.

Item VII

Certain defects in the international application

In contradiction to the requirements of Rule 5.1 a) ii) PCT, neither the relevant prior art disclosed in document D1 to D3 nor these documents are disclosed in the description.